

ASUS ESC4000 G4X

High performance 2U accelerator server with 16 DIMMs and flexible expansion



Intel® Xeon® Scalable platform design

ASUS ESC4000 G4X is built on the Intel® Xeon® Scalable Platform to deliver incredible 2U server performance, packing incredible power into minimal space. 16 DIMM slots provide best-in-class memory capacity and bandwidth, and an integrated I/O controller on the processor eliminates data transfer bottlenecks caused by discrete I/O chipsets for reduced latency and dramatically faster system.

Flexible choice on versatile accelerators



ESC4000 G4X supports up to four double-deck server GPUs in 2U form factor. Broad GPU support including NVIDIA, AMD and Intel.

Flexible 8+2 expansion slots in a 2U server

ESC4000 G4X offers eight full-length PCI Express 3.0 x16 (4 at x16 link or 8 at x8 link), one low-profile PCI Express 3.0 x24 with support of a riser card for additional one PCI Express x16 (x16 Gen3 link) and one PCI Express x8 (x8 Gen3 link). Flexible expandability in a 2U form factor supports diverse storage and networking applications to meet the demands of future expansion and high scalability.

User-friendly design for easier server maintenance

ESC4000 G4X features numerous user-friendly design features that simplify server maintenance. The server's Q-code is visible from the outside of the case to make diagnosing issues easier and more convenient. A tool-less chassis design is included for easy server installation and removal, and a tool-less, hot-swappable fan provides faster and simpler maintenance.

Expandable storage for faster transfer speeds

ESC4000 G4X features one M.2 slot accommodates 2280-size SSDs with support for additional OS storage and PCIe 3.0 x4 bandwidth — 5.3X faster than 6 Gb/s SATA III — for faster boot speeds. ESC4000 G4X is ideal for data centers with high storage and processing demands. ESC4000 G4X supports two 3.5" or 2.5" internal HDD cages.

Smart thermal design for energy efficiency

ESC4000 G4X features a smart thermal radar design with more ambient thermal sensors for the CPU, memory, GPU, SSD, LAN card and front-panel board that provide improved temperature monitoring and enable dynamic fan speed adjustment for better power efficiency.

Highlights

- Powered by Intel® Xeon® Scalable Platform
- 165W CPU with 16 DIMM support
- Flexible choice on versatile accelerators
- Maximum flexible 8+2 expansion slots in a 2U server
- Expandable storage for faster transfer speeds
- High power-efficiency with 1+1 redundant 1600W 80 plus (platinum level) power supply
- User-friendly design for easier server maintenance — tool-less chassis design for installation and removal
- Fully integrated remote server management — ASUS Control Center IT management software and ASMB9-iKVM module support
- Smart thermal design for energy efficiency



Specification

Processor Support		2 x Socket P (LGA 3647) 1st Gen Intel® Xeon® Processor Scalable Family (165W) 2nd Gen Intel® Xeon® Processor Scalable Family (165W) *Refer to support page for more information UPI 9.6 /10.4 GT/s
Core Logic		Intel® Lewisburg PCH C621
Memory	Total Slots	16 (6-channel per CPU, 8 DIMM per CPU)
	Memory Type	DDR4 2933* (1 DIMM per Channel) DDR4 2666/2400/2133 RDIMM/LRDIMM/LRDIMM 3DS (2DIMM per Channel) Intel® Optane™ DC persistent memory (DCPMM) * 2933MHz will drop to 2666MHz when using 2DPC configurations ** Refer to ASUS server AVL for the latest update
Expansion Slots	Total PCI/PCI-X/PCI-E/PIKE Slots	8+2
	Slot Type	Full-length/Full-height 8 * PCI-E 3.0 x16 (4 at x16 Link or 8 at x8 Link) Half-length/Low-profile 1 * PCI-E 3.0 x24 (support with riser card) (1 * PCI-E x16 (x16 Gen3 Link) and 1 * PCI-E x8 (x8 Gen3 Link))
Disk Controller	SATA Controller	Intel® C621 2 x SATA3 6Gb/s ports + 1 x M.2 connector (SATA 6Gb/s & PCI-E Gen3 x4 link) Intel® Rapid Storage Technology Enterprise(RSTe) (For Linux/Windows) (Support Software RAID 0, 1)
	SAS Controller	-
Storage Bays	I = internal A or S will be hot-swappable	2 x 2.5" internal cages or 2 x 3.5" internal cages
Networking	LAN	1 x Dual Port Intel I350-AM2 Gigabit LAN Controller + 1 x Mgmt LAN
Graphic	VGA	Aspeed AST2500 with 64MB VRAM
Auxiliary Storage Device Bay (Floppy / Optical Drive)		-
Front I/O Ports		1 x 80 port, 2 x USB 3.0 ports + 2 x USB 2.0 ports
Rear I/O Ports		2 x USB 3.0 port, 1 x VGA port, 1 x RJ-45 Mgmt LAN port, 2 x RJ-45 GbE LAN ports
Switch/LED		Rear Switch/LED: 1 x Power switch/LED, 1 x Location LED, 1 x Message LED, 1 x HDD Access LED Front Switch/LED: 1 x Power switch/LED, 1 x Location switch/LED, 1 x HDD Access LED, 1 x Message LED, 2 x LAN LED
OS Support		https://www.asus.com/event/Server/OS_support_list/OS.html
Management Solution	Software	ACC
	Out of Band Remote Management	On-Board ASMB9-iKVM for KVM-over-IP
Regulatory Compliance		BSMI, CE, FCC(Class A)
Dimension		800mm * 440mm * 88mm (2U)
Power Supply (following different configuration by region)		1+1 Redundant 1600W 80 PLUS Platinum Power Supply Rating: 100-127Vac/200-240Vac,12.9A/9.5A (x2), 47-63Hz 1+1 Redundant 2200W 80 PLUS Platinum Power Supply Rating: 100-127Vac/200-240Vac,12.9A/9.5A (x2), 47-63Hz *2200W Power supply is only available for selected countries.
Environment		Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)